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- (71) Applicant (for all designated States except US): **N.V. NUTRICIA [NL/NL]; P.O. Box 1, NL-2700 MA Zoetermeer (NL).**
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **HAGEMAN, Robert, Johan, Joseph [NL/NL]; Hamsterlaan 12, NL-6705 CT Wageningen (NL). VERLAAN, George [NL/NL]; Rietveldlaan 16, NL-6708 SB Wageningen (NL).**
- (74) Agent: **VAN WESTENBRUGGE, Andries et al; Nederlandsch Octrooibureau, Scheepingsweg 82, P.O. Box 29720, NL-2502 LS The Hague (NL).**
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(54) Title: **NUTRITIONAL OR PHARMACEUTICAL COMPOSITIONS FOR INCREASING THE CREATINE RESPONSE OF ORGANISMS**

(57) Abstract: There is provided a nutritional or pharmaceutical composition comprising a protein fraction containing L-serine and an energy metabolism precursor wherein the composition is free of glycine or if glycine is present within the composition, the weight ratio of L-serine: glycine after hydrolysis of the composition is of more than 2.7:1, which composition provides an effective creatine response within mammals muscle and methylation reaction capacity of organisms.

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